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SOME ECONOMIC ASPECTS OF THE POTATO SITUATION

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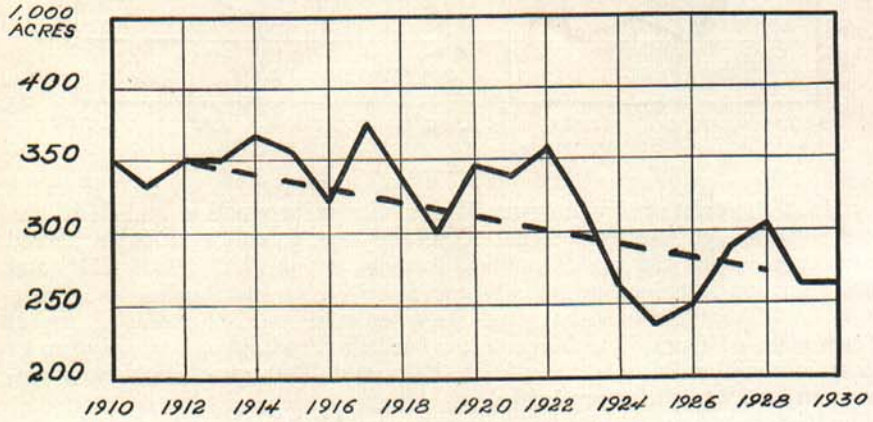
SOME ECONOMIC ASPECTS OF THE POTATO SITUATION

R. V. GUNN

I. Trend of Production in Michigan

Potatoes are one of Michigan's chief cash crops. Based on December 1 farm prices, the value of the Michigan potato crop for the past ten years has averaged over 22 million dollars annually. Only two other cash crops, beans and winter wheat, approximate this income. However, in spite of the significance of potatoes as a money crop for Michigan farmers, the acreage devoted to that crop in this state has decreased more than 20 per cent during the past ten years. (See Chart No. 1.)

CHART NO. 1 - TREND OF POTATO ACREAGE IN MICHIGAN

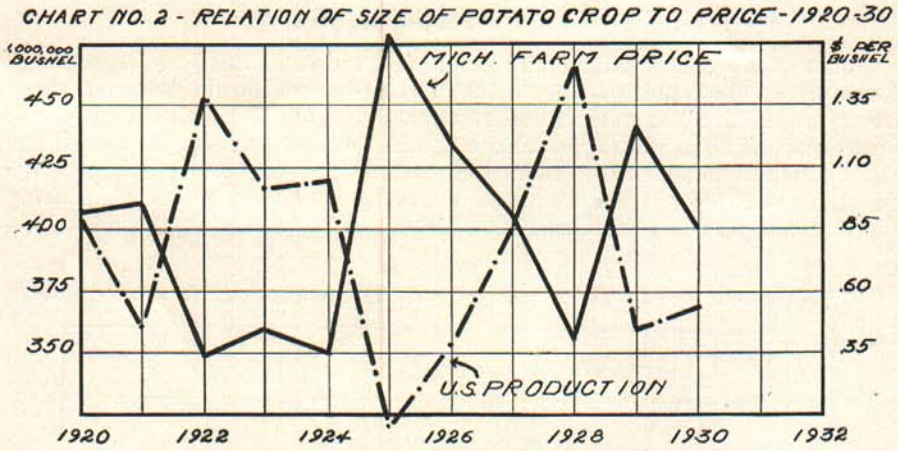


In contrast to the situation in Michigan, the acreage planted to potatoes in Maine has increased 50 per cent during the past ten years. During the same period Idaho has doubled her potato acreage. One reason for these divergent trends is to be found in the relative yields per acre and consequent profitableness of the crop. For the ten-year period, 1919 to 1928, the average yield per acre has been 104 bushels in Michigan, 181 bushels in Idaho, and 246 bushels in Maine.

Another reason for the unfavorable relative situation of the Michigan growers lies in the quality of the product and the merchandising practices followed. In other words, from a competitive point of view, potato growers of Michigan are faced with both production and marketing problems. This bulletin is an attempt to present some of the more important economic factors that may help farmers to plan a more profitable production and marketing program.

II. Relation of Production to Price

It is quite general knowledge that a large production of any crop usually means a low price for that crop, and, conversely, a small production usually means a high price. This is particularly true of the potato crop, which does not enter into international trade to any extent. It is the size of the United States production as a whole, however, and not the Michigan production which affects the Michigan farm price of potatoes.

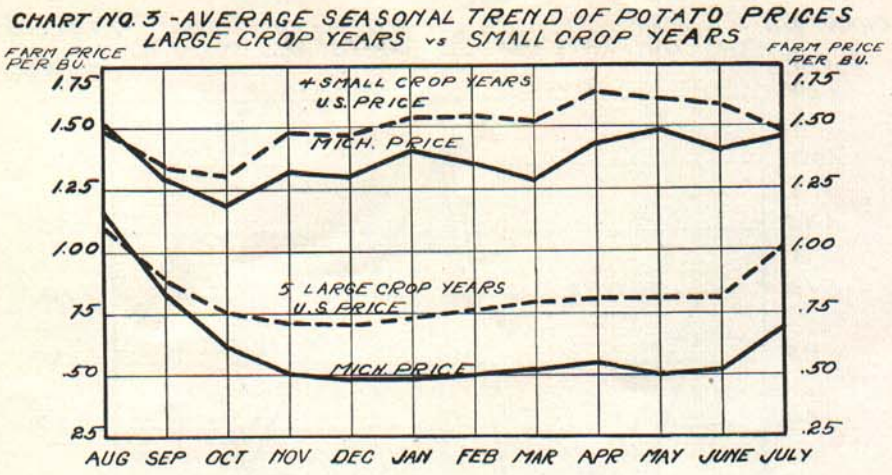


In fact, the relationship between United States production and Michigan price is quite definite. (See chart No. 2.) For instance, a large United States crop, from 425 to 450 million bushels, as in 1922, 1923, 1924, and 1928, returned Michigan growers from 35 to 40 cents per bushel on December 1. A 400 million bushel United States crop, as in 1920 and 1927, meant a farm price of from 85 to 90 cents per bushel. And again, a small crop of 325 to 350 million bushels, as in 1925, 1926, and 1929, gave Michigan farmers from $1.25 to $1.50 per bushel.

On the other hand, while in a general way Michigan production follows the "ups" and "downs" of the United States production, there are several notable exceptions. In the years 1925 and 1926, when the United States production was low and Michigan production high, the average per acre returns to Michigan growers were twice the normal returns. In 1926,7 however, Michigan was caught with a short crop when the United States production was slightly above normal. The price was only fair that year.

III. Seasonal Price Trends

One of the most interesting and significant aspects of the potato situation to the individual producer is the seasonal trend of potato prices. Whether to sell potatoes at digging time or hold until later in the season is a problem always facing the farmer. Chart No. 3 shows some facts to take into consideration.

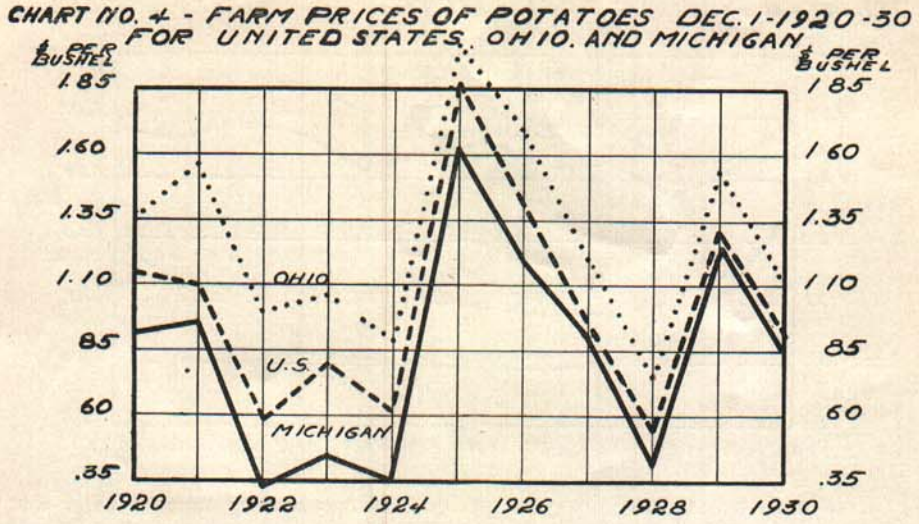


Considering the past nine-year period as representing normal after-war conditions, we find five large United States potato crops and four small crops. The average production for the small crops was 349 million bushels, and for the large crops 431 million bushels. The average farm price for the season in large crop years was approximately 52 cents per bushel, compared to $1.34 per bushel for the small crop years. For the small crop years, the average rise in price was 21 cents per bushel from October to January, and 29 cents when the crop was held until May. For the large crop years, there was actually a decline in price. In January, prices were 13 cents per bushel less than in October. Evidently growers who held their potatoes in large crop years not only took a lesser price in the spring but also had to meet the losses and storage charges. For the small crop years, the 25 to 30 cent margin from fall to spring may have made it profitable for some farmers to hold. It is obvious, however, that if most farmers had "held" in low crop years or had sold early in large crop years, these price differentials would not have materialized.

IV. Michigan a Surplus Producing State

Government statistics show that the farm price of potatoes on December 1 has, for the past ten years, averaged $1.03 per bushel for the United States, 85 cents for Michigan, and $1.29 for Ohio. In other words, Michigan growers received 42 cents per bushel less than did Ohio growers, and 18 cents less per bushel than the United States average. (See Chart No. 4.) The chief reason for this disparity in prices is that Michigan produces a surplus of potatoes and Ohio is a deficit state. Production and out-of-state shipments vary from year to year, but for the past eight years railroad shipments out of Michigan have averaged about 10,000 cars, or six and one-half million bushels. This represents about 25 per cent of the Michigan potato crop.

On the other hand, Ohio imports approximately 10 million bushels of potatoes annually, about as much as is produced within the state. In good years this neighboring state obtains close to 25 per cent of this import from



Michigan. As a matter of fact, Ohio is Michigan's best customer, with Pennsylvania second, and Indiana third. These three states take about 65 per cent of Michigan's surplus potatoes.

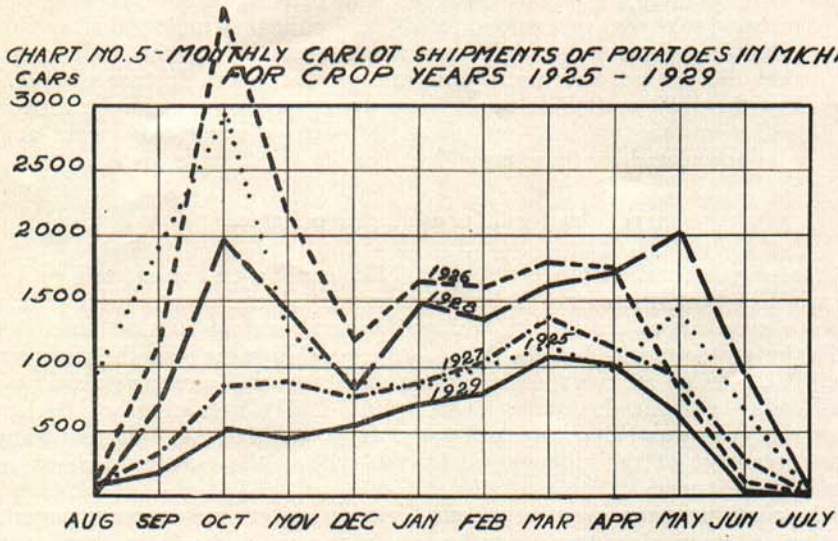
V. Competition from Other States

In looking to out-of-state markets, however, Michigan has serious competition to meet. According to the Bureau of Railway Economics, the percentage of potato unloads that come from Michigan in five or six important cities in Ohio has been decreasing during the past seven years. These percentages, as reported in publications of the above organization, were as follows: 1923, 26 per cent; 1924, 32 per cent; 1925, 28 per cent; 1926, 21 per cent; 1927, 16 per cent; 1928, 12 per cent; 1929, 14 per cent. Part of this decline is only apparent, however, because truck shipments have increased in recent years. Furthermore, with other state acreage decreasing, Michigan does not have as much surplus as formerly. On the other hand, the good quality potatoes coming into these outside markets from other states may be one reason why Michigan is losing some of her markets.

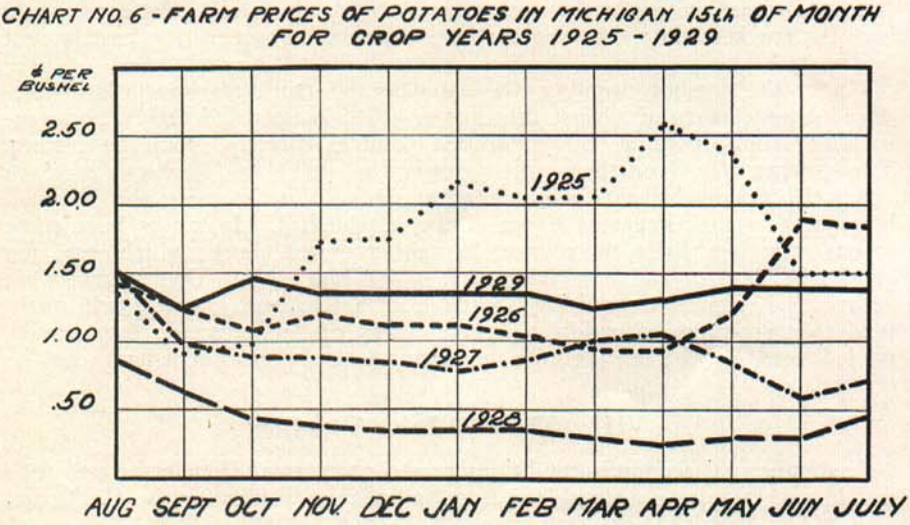
This competition from other states for Michigan's normal out-of-state markets is not the only problem. Imports of potatoes into Michigan cities from other potato producing states is also a factor. This was particularly true during the past marketing season, when large shipments of potatoes from Maine made their appearance on the Detroit market. More than 1,700 cars of Maine potatoes were unloaded in Detroit during 1930, as compared to 128 cars in 1929, and 12 cars in 1928. Idaho potatoes put up in special 25-pound bags found their way quite generally to both central and local markets throughout the entire state. This situation existed despite the fact that freight rates from Idaho were approximately 105 cents per hundred pounds, and from points in Maine 60 cents or better; while from the chief potato-growing sections of our own state to Detroit, the rate varies from 22 to 30 cents.

VI. Carlot Movement of Potatoes in Michigan

In normal crops years, Michigan ships about 15,000 carloads of potatoes. For the recent light crop years, 1927 and 1929, shipments averaged only about half this amount. The seasonal movement of these shipments reflects quite closely the farmer's judgment, or guess, as to the best time of the year to sell. Usually there are two seasons during the marketing year when ship-



ments are relatively heavy—in the fall at "digging time," and again in the spring. From Chart No. 5 it will be noticed that in some years, as in 1925 and 1926, shipments were considerably heavier in the fall than in the spring. But in other years, as in 1927 and 1929, shipments were heavier in the spring



than in the fall. Apparent reasons for these fluctuating practices are several. In large crop years many small producers have an excess of potatoes which they sell at "digging time." On the other hand, many commercial producers anticipate rising prices in a small crop year and hold potatoes off the market in the fall. Unfortunately, many farmers are guided in both their production and selling programs by the seasonal price movement for the previous year.

By comparing the seasonal price movements (Chart No. 6) with the seasonal carlot shipments (Chart No. 5) it can be seen that the bulk of the 1925 crop was sold early at prices fully $1.00 a bushel under the spring prices. But in following the same practice for marketing the 1926 crop, when prices did not advance until June, the growers were fortunate to sell early. For the 1927 and 1929 crops, however, there was a strong tendency to withhold from the market, but prices failed to advance. Farmers and buyers who speculated on these crops lost heavily by doing so.

VII. The Truck Shipping Problem

In recent years marketing potatoes in Michigan by trucks instead of by railroads has been increasing. Just how much of the potato crop which goes into commercial channels is shipped by railroad and how much is handled by motor trucks is difficult to estimate. However, for the six-year period (1921-1926) an average of 36 per cent of our potato crop was shipped by railroads. For the three-year period (1927-1929) an average of 24 per cent of our crop was shipped by railroads. It is possible that this reduction in the percentage of the crop moved by rail reflects the expansion of shipments by auto trucks.

If the continued improvement in our highway system means a permanent reduction in commodity transportation costs, it should result in benefit to the grower. Insofar as the irregular operations of truckers, who can operate most advantageously only in high-priced years, tempts farmers to sell directly to the trucker instead of through their own cooperative agency, a serious problem of adjustment confronts the producers organization. Perhaps if the truckers were induced to buy from the local associations, or if the cooperative itself used motor trucks, economy would result to all. Potatoes would cost the truckers no more, and the local association's operating costs might be lowered.

Under the present situation, the extension of truck transportation introduces some factors which are detrimental to the potato industry. Some individual truck operators buy ungraded potatoes directly from the farmer. These, when placed on the markets, lower the quality of Michigan stock in comparison to graded potatoes from other states. Furthermore, the responsibility of the truck operator is not always established. Instances have come to our attention where the trucker has either issued checks which were not good, or failed to pay for potatoes entrusted to him until market returns were secured. Legislation requiring special license fees and heavy bonds might tend to correct this situation. Further study of this situation needs to be made, however, before definite recommendations or conclusions can be offered.

VIII. The 1929 Price Situation

Under normal economic conditions potato growers and dealers were justified in expecting a considerable seasonal advance in prices for the 1929 crop.

The United States crop was light. In former small crop years, as indicated in Chart No. 3, prices advanced from October to May from 25 to 30 cents per bushel on the average. As indicated in Chart No. 5, carlot shipments for the 1929 crop were made accordingly, but the price advances did not materialize. As a result, farmers and dealers who speculated lost heavily. Two explanations are at least plausible. In the first place, compared to previous years with similar size crops, the price of potatoes started too high. Instead of opening up in October at about $1.20 per bushel, and then advancing 25 to 30 cents by spring, the price started at about $1.40 and barely maintained that level for the balance of the marketing season. In the second place, the prolonged industrial depression was having a telling effect upon the purchasing power of the consumer. As a result, the entire general price level was declining and this affected the price of potatoes as well as other commodities.

IX. The 1930 Price Situation

The government estimates for 1930 are 361 million bushels for the United States, another light crop year. This is approximately 3.0 bushels per capita, compared to 3.5 bushels as the average for the past ten years. A crop of this size usually bring better than average prices. However, in the chief potato producing areas of this state Michigan growers received last fall only from 60 to 65 cents per bushel. Farmers, as well as many others, are somewhat puzzled to explain the present low farm price quotations for potatoes. The prolonged industrial unemployment, with consequent loss of buying power, is at least one ready explanation. Another factor, closely related, is the lack of speculative buying. Buyers who purchased heavily last year, anticipating price advances that never materialized, are timid so far this year. Furthermore, although the potato crop for 1930 was small, it was not as small as first indicated. Government estimates were 339 million bushels for September, 352 million bushels for October, and 361 million bushels for December. Again the quality of Michigan potatoes was not up to standard. As a result of all these factors, quotations have been low and offerings light.

Apparently the economic "law of supply and demand" has not yet been repealed. Small crops with normal demand mean high prices, but small crops with weak demand do not make high prices. This is the situation we find ourselves in at present. Still another factor that must not be overlooked is the world-wide decline in the general price level.

X. Controlled Marketing Program Needed

A commodity well produced is half marketed. Varieties and quality of potatoes in accordance with the consumer demand are first requisites of successful selling. Furthermore, some degree of control of production will help to prevent a surplus problem. But even under the best possible production program, an efficient and orderly marketing system is needed to distribute and gauge the time of selling properly. To so control the marketing requires group action. Group action in this case means a grower-owned and grower-controlled co-operative marketing agency. Such action is necessary not only to reduce marketing costs and regulate shipments, but also to increase the farmers' bargaining power by decreasing the number of selling agencies.

XI. The Michigan Potato Growers Exchange

Michigan farmers have already made much progress in the field of co-operative marketing. Approximately 20 per cent of the potatoes which enter into commercial marketing channels from Michigan are sold and shipped by the growers' marketing agency, the Michigan Potato Growers Exchange. That is, this organization supervises the grading, makes the sale, and collects the money for about 60 local co-operative associations representing approximately 6,000 growers. This organization has been functioning in this manner, and successfully, for twelve years. However, it does not have complete control over the marketing of even this 20 per cent of the commercial potato crop. Under the present plan of operation, the decision and responsibility as to when the potatoes shall be sold rest largely with the individual growers. The question is raised as to whether this is not an opportune time for farmers to expand their co-operative selling program—expanding from the standpoint of increased volume, and expanding from the standpoint of delegating to the central sales agency a greater degree of control over the potato shipments than it has exercised in the past.

XII. Looking Ahead

It is not consistent with present conditions and future prospects to think of the potato crop in Michigan's agriculture as a declining business. It is a 20 million dollar industry even under present average yields. With certified seed, commercial fertilizer, and improved production practices such as are being used and followed by the more efficient producers, many growers in Michigan can double their production per acre. Furthermore, cooperative marketing is well under way in Michigan. With the passage of the new Agricultural Marketing Act, administered by the very able and co-operatively minded Federal Farm Board, government assistance and financial support such as have never before been available are doing much to further develop large scale co-operative commodity marketing organizations in Michigan, as well as elsewhere in the United States. The long-time outlook for the potato industry in Michigan should be encouragnig. Farmers should hold onto, expand, and perfect an industry that has held so prominent a place in Michigan's agriculture.